

## **CLAIMS**

1.(original) In a computer network that includes at least two computers communicatively coupled to each other, a system for sharing knowledge objects among the registered users of the computer network comprising:

5           a means for maintaining and updating a collection of local or private knowledge objects managed by users, wherein each individual user can access any of the private knowledge objects directly; and

          a means for maintaining and updating a collection of published knowledge objects contributed by the users, wherein any of the users can access any of the  
10 published knowledge objects by entering a unique user identification; and

          a means for maintaining and updating a collection of listed knowledge objects contributed by the users, wherein any of the listed knowledge objects can be identified but cannot be accessed by any of the users other than the user who contributed the listed knowledge object unless the user who contributed the listed  
15 knowledge object authorizes the proposed access.

2.(original) The system of Claim 1, further comprising:

          a means for changing a local or private knowledge object into a listed knowledge object, wherein said private knowledge object can be neither identified nor accessed by any of the users other than the user who possesses  
20 the private knowledge object; and

          a means for publishing a private knowledge object or a listed knowledge object as a published, directly accessible knowledge object.

3.(original) The system of Claim 2, further comprising a means for tracking any of:

the number of times a user discloses a private knowledge object as a listed knowledge object;

5 the number of times a user authorizes other users' access to a listed knowledge object;

the number of times a user publishes knowledge objects;

the number of times a published knowledge object is utilized by the users other than the user who contributed the published knowledge object; and

10 the number of times a user utilizes knowledge objects originating from other users;

wherein said numbers are used in determining a reward to the user for the user's involvement in knowledge sharing.

4.(original) The system of Claim 1, wherein a user searches for a knowledge  
15 object by any of:

entering a query; and

navigating one or more directories.

5.(original) In a computer network that includes at least two computers  
communicatively coupled to each other, a method for sharing knowledge objects  
20 among the registered users of the computer network, the method comprising the steps of:

maintaining and updating a collection of local or private knowledge objects managed by users, wherein each individual user can access any of the private knowledge objects directly; and

5 maintaining and updating a collection of published knowledge objects contributed by the users, wherein any of the users can access any of the published knowledge objects by entering a unique user identification; and

10 maintaining and updating a collection of listed knowledge objects contributed by the users, wherein any of the listed knowledge objects can be identified but cannot be accessed by any of the users other than the user who contributed the listed knowledge object unless the user who contributed the listed knowledge object authorizes the proposed access.

6.(original) The method of Claim 5, further comprising the steps of:

15 changing a private knowledge object into a listed knowledge object, wherein said private knowledge object can be neither identified nor accessed by any of the users other than the user who possesses the private knowledge object; and

publishing a private knowledge object or a listed knowledge object as a published knowledge object.

7.(original) The method of Claim 6, further comprising any step of:

20 tracking the number of times a user discloses a private knowledge object as a listed knowledge object;

tracking the number of times a user authorizes other users' access to a listed knowledge object;

tracking the number of times a user publishes knowledge objects;

tracking the number of times a published knowledge object is utilized by the users other than the user who contributed the published knowledge object; and

5 tracking the number of times a user utilizes knowledge objects originating from other users;

wherein said numbers are used in determining a reward to the user for the user's involvement in knowledge sharing.

8.(original) The method of Claim 5, wherein a user searches for a knowledge  
10 object by any of:

entering a query; and

navigating one or more directories.

9.(currently amended) In a computer network that includes at least two computers communicatively coupled to each other, a process performed by the  
15 computers comprising the steps of:

(a) accepting a first user's request;

(b) searching a local or private knowledge object repository, each of the private knowledge objects being associated with a specific user;

(c) searching a central knowledge object repository and all contributed  
20 knowledge objects, each of the contributed knowledge objects being associated with a specific user;

(d) returning to the first user a list of links for all matching knowledge objects, said matching knowledge objects being marked either local or published or listed;

(e) allowing access if the first user chooses a local or published  
5 knowledge object from the list; and

(f) forwarding the first user's request to a second user and prompting the second user for authorization of access if the first user chooses a listed knowledge object from the list, the second user having control of access to the listed knowledge object.

10 10.(original) The process of Claim 9, wherein the first user initiates a request by any of:

entering a query; and

clicking a link in a directory.

11.(original) The process of Claim 9, wherein the second user has the option to  
15 be either anonymous or identifiable.

12.(original) The process of Claim 9, wherein the step (e) further comprises the step of: prompting the first user to enter a correct user identification.

13.(original) The process of Claim 9, wherein the step (f) further comprises the step of:

20 requiring a sufficiently specific query so that a request cannot be forwarded to the second user until the search request is sufficiently specific so that it yields a finite, manageable set of results.

14.(original) The process of Claim 9, after the step (f), further comprising the step of:

(g) returning to the first user the chosen listed knowledge object if the second user allows access;

5 (h) notifying the first user that the request is not completed if the second user declines access to the listed knowledge object.

15.(original) The process of Claim 14, wherein the step (g) further comprises the step of:

prompting the second user to add a message for the first user.

10 16.(original) The process of Claim 14, wherein the step (g) further comprises the step of:

prompting the second user to publish the chosen listed knowledge object.

17.(original) The process of Claim 9, wherein the step (f) further comprises the step of:

15 prompting the second user to provide a substitution if the second user determines that the chosen listed knowledge object is irrelevant or sub optimal for the task indicated in the first user's request.

18.(original) The process of Claim 17, further comprising any step of:

20 returning to the first user a private knowledge object from the second user's private domain if the second user so decides; and

prompting the second user to mark the private knowledge object as published.

19.(original) The process of Claim 18, further comprising any step of:

tracking the number of times a user discloses a private knowledge object as a listed knowledge object;

5 tracking the number of times a user authorizes other users' access to a listed knowledge object;

tracking the number of times a user publishes knowledge objects;

tracking the number of times a published knowledge object is utilized by the users other than the user who contributed the published knowledge object; and

10 tracking the number of times a user utilizes knowledge objects originating from other users;

wherein said numbers are used in determining a reward to the user for the user's involvement in knowledge sharing.

20.(original) A computer usable medium containing instructions in computer readable form for carrying out a process for promoting information and knowledge sharing among the users registered to a computer network, the process comprising the steps of:

(a) accepting a first user's request;

20 (b) searching a local or private knowledge object repository and all local, directly accessible knowledge objects associated with a specific user;

(c) searching a central knowledge object repository and all contributed knowledge objects associated with the users;

(d) returning to the first user a list of links for all matching knowledge objects, said matching knowledge objects being marked either local or published or listed;

(e) allowing access if the first user chooses a local or published  
5 knowledge object from the list; and

(f) forwarding the first user's request to a second user and prompting the second user for authorization of access if the first user chooses a listed knowledge object from the list, the second user having control of access to the listed knowledge object.

10 21.(original) The computer usable medium of Claim 20, wherein the first user initiates a request by any of:

entering a query; and

clicking a link in a directory.

15 22.(original) The computer usable medium of Claim 21, wherein the first user initiates the request either anonymously or identifiably.

23.(original) The computer usable medium of Claim 20, wherein the second user elects to be identified in the system either anonymously or identifiably.

24.(original) The computer usable medium of Claim 20, wherein the step (e) further comprises the step of:

20 prompting the first user to enter a correct user identification.

25.(original) The computer usable medium of Claim 20, after the step (f), further comprising the step of:



(g) returning to the first user the chosen listed knowledge object if the second user allows access;

(h) notifying the first user if the second user declines access to the listed knowledge object.

- 5 26.(original) The computer usable medium of Claim 25, wherein the step (g) further comprises the step of:

prompting the second user to add a message for the first user.

27.(original) The computer usable medium of Claim 15, wherein the step (g) further comprises the step of:

- 10 prompting the second user to publish the chosen listed knowledge object.

28.(original) The computer usable medium of Claim 20, wherein the step (f) further comprises the step of:

prompting the second user to make a suggestion if the second user thinks that the chosen listed knowledge object is irrelevant to the first user's request.

- 15 29.(original) The computer usable medium of Claim 28, further comprising any step of:

returning to the first user an unlisted knowledge object from the second user's private domain if the second user so decides; and

- 20 prompting the second user to make the unlisted knowledge object as listed or published.

30.(original) The computer usable medium of Claim 29, further comprising any step of:

tracking the number of times a user discloses a private knowledge object as a listed knowledge object;

tracking the number of times a user authorizes other users' access to a listed knowledge object;

5 tracking the number of times a user publishes knowledge objects;

tracking the number of times a published knowledge object is utilized by the users other than the user who contributed the published knowledge object; and

10 tracking the number of times a user utilizes knowledge objects originating from other users;

wherein said numbers are used in determining a reward to the user for the user's involvement in knowledge sharing.

31(new). In a computer network that includes at least two computers communicatively coupled to each other, a system for sharing knowledge objects  
15 among the registered users of the computer network comprising:

a first means for maintaining and updating a collection of local or private knowledge objects managed by users, wherein each individual user can access his own private knowledge objects directly; and

20 a second means for maintaining and updating a collection of published knowledge objects contributed by the users with accompanying metadata, wherein any of the users can access any of the published knowledge objects directly by entering a unique user identification; and

a third means for maintaining and updating a collection of metadata which both represent the brokered knowledge objects and assist in the location of the brokered knowledge objects contributed by the users, wherein any of the metadata can be identified but the knowledge object represented by the metadata cannot be accessed directly by any of the users other than the user  
5 who propagates the metadata unless the user authorizes the proposed access.

32.(new) The system of Claim 31, wherein:

when the user chooses to change the sharing status of a first knowledge object from private to published, both the data of the first knowledge object and  
10 the metadata of the first knowledge object are propagated to a central repository;

when the user chooses to change the sharing status of a second knowledge object from private to brokered, only the metadata of the second object is propagated to the central repository;

when the user chooses to change the sharing status of a third knowledge object from published to brokered, the data of the third knowledge object is  
15 deleted from the central repository, while the metadata of the third knowledge object remains in the central repository;

when the user chooses to change the sharing status of a fourth knowledge object from published to private, both the data and the metadata of the fourth  
20 object are deleted from the central repository;

when the user chooses to change the sharing status of a fifth knowledge object from brokered to published, the data of the fifth object is propagated to the central repository; and

when the user chooses to change the sharing status of a sixth knowledge object from brokered to private, the metadata of the sixth knowledge object is deleted from the central repository.

33.(new) In a computer network that includes at least two computers  
5 communicatively coupled to each other, a method for sharing knowledge objects among the registered users of the computer network, the method comprising the steps of:

maintaining and updating a collection of local or private knowledge objects managed by users, wherein each individual user can access his own private  
10 knowledge objects directly; and

maintaining and updating a collection of published knowledge objects contributed by the users, wherein any of the users can access any of the published knowledge objects by entering a unique user identification; and

maintaining and updating a collection of metadata pertaining to brokered  
15 knowledge objects contributed by the users, wherein any of the metadata can be identified but the content of brokered knowledge object represented by the metadata cannot be accessed by any of the users other than the user who propagates the metadata unless the user authorizes the proposed access.

34.(new) The method of Claim 33, further comprising any of the steps of:

20 when the user chooses to change the sharing status of a first knowledge object from private to published, propagating both data of the first knowledge object and an metadata of the first knowledge object to a central repository;

when the user chooses to change the sharing status of a second knowledge object from private to brokered, propagating only an metadata of the  
25 second knowledge object to the central repository;

when the user chooses to change the sharing status of a third knowledge object from published to brokered, deleting the data of the third knowledge object from the central repository but maintaining an metadata of the third knowledge object in the central repository;

- 5           when the user chooses to change the sharing status of a fourth knowledge object from published to private, deleting both the data and an metadata of the fourth knowledge object from the central repository;

- when the user chooses to change the sharing status of a fifth knowledge object from brokered to published, propagating the data of the fifth knowledge  
10 object to the central repository; and

          when the user chooses to change the sharing status of a sixth knowledge object from brokered to private, deleting the metadata of the sixth knowledge object from the central repository.

- 35.(new) In a computer network that includes at least two computers  
15 communicatively coupled to each other, a system for sharing knowledge objects among the registered users of the computer network comprising:

(a) a client application running in each of the computers, said client application enables a user to

interact with the system and other users;

- 20           maintain and update a collection of private knowledge objects; and

manage the sharing status of any of the private knowledge objects, said sharing status including private, brokered, and published;

wherein each of the private knowledge objects is associated with an metadata representing and describing the specific knowledge object;

(b) a server application, running in one or more of the computers, said server application maintains and updates:

5           a collection of published knowledge objects contributed by the users, any of the users can access any of the published knowledge objects by entering a unique user identification, and

          a collection of metadata pertaining to knowledge objects brokered by the users, wherein any of the metadata is searchable and identifiable but the  
10           content of the metadata cannot be accessed by any of the users other than the user who contributed the metadata unless the user who contributed the metadata authorizes the proposed access;

(c) at least one database associated with said server application and said client application,

15           wherein said database may store knowledge objects and the associated metadata thereof;

          wherein when the user chooses to change the sharing status of a first knowledge object from private to published, both the data of the first knowledge object and the associated metadata are propagated to said database from the  
20           user's computer;

          wherein when the user chooses to change the sharing status of a second knowledge object from private to brokered, only the metadata of the second knowledge object is propagated to said database from the user's computer;

wherein when the user chooses to change the sharing status of a third knowledge object from published to brokered, the data of the third knowledge object is deleted from said database, but the metadata of the third knowledge object remains in said database;

- 5            wherein when the user chooses to change the sharing status of a fourth knowledge object from published to private, both the data and the metadata of the fourth knowledge object are deleted from said database;

- wherein when the user chooses to change the sharing status of a fifth knowledge object from brokered to published, the data of the fifth object is  
10       propagated to said database from the user's computer; and

             wherein when the user chooses to change the sharing status of a sixth knowledge object from brokered to private, the metadata of the sixth knowledge object is deleted from said database.

- 36.(new) The system of Claim 35, wherein any of said collection of metadata  
15       pertaining to knowledge objects, which both describe the knowledge objects and provide for access to the knowledge objects, may be comprised any of:

             data that is automatically derived from the knowledge object; and

             descriptive data added by the user.